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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/821,964	04/12/2004	Yoichi Imamura	119240	2369
25944	7590	12/21/2007		
OLIFF & BERRIDGE, PLC P.O. BOX 320850 ALEXANDRIA, VA 22320-4850			EXAMINER TUROCY, DAVID P	
			ART UNIT 1792	PAPER NUMBER
			MAIL DATE 12/21/2007	DELIVERY MODE PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

**Office Action Summary**

Application No.

10/821,964

Applicant(s)

IMAMURA, YOICHI

Examiner

David Turocy

Art Unit

1792

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 05 October 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-23 is/are pending in the application.
- 4a) Of the above claim(s) 8-23 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-7 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date <u>10/16/07, 8/23/04, 4/12/04, 4/12/04</u> | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Election/Restrictions***

1. Applicant's election with traverse of invention I in the reply filed on 10/5/2007 is acknowledged. The traversal is on the ground(s) that a search for both distinct inventions is not burdensome. This is not found persuasive because the search for one of the distinct inventions does not necessarily result in the search of another. Specifically, the apparatus can be used for another materially different process and therefore a search would not encompass the same scope as the claimed method.

The requirement is still deemed proper and is therefore made FINAL.

2. Claims 8-23 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected invention, there being no allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement in the reply filed on 10/5/07.

### ***Priority***

3. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

### ***Information Disclosure Statement***

4. The information disclosure statement (IDS) submitted on 10/16/07, 4/4/06, 8/23/04, and 4/12/2004 are in compliance with the provisions of 37 CFR 1.97.

Accordingly, the information disclosure statement is being considered by the examiner.

5. The information disclosure statement filed 4/12/04 is a duplicate of an IDS filed on the same day. Therefore, the second copy has been crossed out as being a duplicate.

***Claim Rejections - 35 USC § 102***

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. Claims 1-7 are rejected under 35 U.S.C. 102(b) as being anticipated by JP 2001-353454, hereafter JP '454.

Claim 1: JP '454 discloses a method for forming a electronic device, including converting and creating pseudo-molecular ions of vapor state, and setting potentials of a plurality of electrodes on a surface to values and selectively sticking the ions to the substrate (see for example - figures, 0005-0007, 0014-0018, 0035-0043).

Claim 2: JP '454 discloses altering the solution to fine droplets and ionizing the droplets, and then creating pseudo molecular ions of the vapor state by vaporizing the droplets and thereafter reducing the content of the solvent and selectively setting potentials of a plurality of electrodes on a surface to values and selectively sticking the ions to the substrate (for example - figures, 0005-0007, 0014-0018, 0035-0043).

Claim 3: JP '454 discloses separating the solvent and reciprocally deflecting the material ions (0035, figures). the examiner notes that the claim fails to specify a

reference point and therefore the material ions are reciprocally deflected from an arbitrary reference point.

Claim 4-7: These claims are taught by JP '454 (figures).

8. Claim 1 is rejected under 35 U.S.C. 102(b) as being anticipated by US Patent 5066512 by Goldowsky, hereafter US '512.

US '512 discloses a method for forming a electronic device, including converting and creating pseudo-molecular ions of vapor state, and setting potentials of a plurality of electrodes on a surface to values and selectively sticking the ions to the substrate (see for example - figures).

***Claim Rejections - 35 USC § 103***

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over JP '454 in view of US Patent 6696105, hereafter US '105.

JP '454 discloses all that is taught above and the examiner notes that the claim fails to specify a reference point and therefore the material ions are reciprocally deflected from an arbitrary reference point. However, US '105 discloses modifying the flying deflection of ions in a coating method for organic OLED films, discloses controlling

the coating direction using a mask with a voltage applied to the conductive material (Column 3). Therefore, it would have been obvious to one of ordinary skill in the art to have modified the flying direction of the material ions with a reasonable expectation of success, including reciprocally deflecting, because US '105 discloses adjusting the flying direction is well within the skill of one ordinary in the art.

11. Claims 1-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over JP '454 in view of US Patent Publication 20030157269, hereafter USPP '269 as evidenced by US Patent 6639212, hereafter US '312

JP '454 discloses all that is taught above, including coating using ions, and the examiner maintains the position that JP '454 discloses such pseudo molecular ions. However, in the alternative, US '269 discloses a known and suitable method for coating a substrate with a organic material in a solvent by ion deposition discloses using electrospray ionization (0004, 0007, figures, 0019) and US '312 discloses that electrospray ionization forms pseudo molecular ions of large molecules, including producing charged droplets, shrinking by evaporating the charged droplets, thereafter formation of the gas phase ions (column 6, lines 55-column 7, line 15, column 16, lines 6-10).

Therefore, taking the references collectively, it would have been obvious to one of ordinary skill in the art to have deposited the solution of JP '454 by electrospray ionization because JP '454 discloses ion deposition and US '269 and US '312 discloses electrospray ionization is a known and suitable method for deposition films using ions.

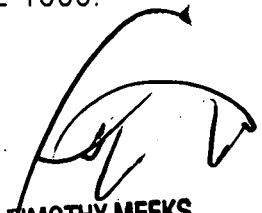
**Conclusion**

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to David Turocy whose telephone number is (571) 272-2940. The examiner can normally be reached on Monday-Friday 8:30-6:00, No 2nd Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Timothy Meeks can be reached on (571) 272-1423. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/David Turocy/  
Patent Examiner  
AU 1792

  
**TIMOTHY MEEKS**  
SUPERVISORY PATENT EXAMINER